

REMARKS

The above amendment and these remarks are responsive to the Office action of Examiner Marc D. Thompson, mailed 9 Nov 2004.

Claims 1-12, and 14-20 are in the case, none having been allowed.

Drawings

5. The drawings submitted on 6/25/2002 have been accepted by the Examiner.

Specification

7. Applicants prior amendment to Page 20, last paragraph, of the Specification has been entered, and found to obviate the rejection based on incorporation by reference.

8. With respect to Page 16, last paragraph, the Examiner

is correct in his presumption that "Applicant intends to construe URL usage to a generalized logical address which points to a given resource on the network which is independent from the protocol used to enact the transfer of the information of the resource, that is, a 'logical network address'."

35 U.S.C. 101

Claim 16 has been rejected under 35 U.S.C. 101.

Applicants appreciate the Examiner's coaching on how a claim such as claim 16 can be constructed so as to pass muster under Section 101. Applicants have amended the claim accordingly, and request that the rejection under 35 U.S.C. 101 be withdrawn and the claim allowed.

35 U.S.C. 112

Claims 1-20 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite.

The Examiner finds the following claimed concepts to be indefinite in claim 1 (and, therefore, in its dependent

claims 2-11):

First: "running first mirror image system and application code..." and " second mirror image system and application code..."

The Examiner's specific objections to these first phrases are:

1. use of idiomatic English,
2. no specific functionality is recited,
3. "mirror systems" are not defined,
4. "application code" remains arbitrary,
5. it is unclear whether the first and second "application codes" are identical or distinct,
6. it is unclear whether the "application data requests" relate to either or both of these "applications", and
7. distinct recitation of the "clusters" (i.e., having no recited interaction) lacks sufficient structure.

Applicants have amended claim 1-11 to clarify and correct them as required by the Examiner. In so doing, applicants have removed references to "mirror image", clarified and distinguished the various application code

references, and specified the relationship between the clusters.

Second: "a second network dispatcher responsive said first clustered servers for..."

This phrase lacks the preposition "to", and applicants have amended claim 1 to correct it.

Third: "...periodically replicating with each other..."

The Examiner's specific objections to this third phrase, which appears in all of applicant's claims, are:

1. use of idiomatic English, and
2. it is unclear whether these limitations relate to synchronizing applications and data sets (as inferred in the specification) and/or relate to actual replication, invocation, and/or migration of server instances.

Applicants have amended all independent claims 1, 12, 15 and 16 to clarify the replication operation.

The Examiner finds the following claimed concepts to be indefinite in claims 12 and 15 (and, therefore, in dependent claim 14):

Fourth: "clusters of virtual servers"

The Examiner's specific objection to this fourth phrase is stated as follows:

"It is unclear what this is attempting to describe, and what the meaning or usage of the term "virtual" is being applied to. It is unclear whether the clusters are logically defined (virtual server sets), or what would constitute a virtual server. The term "server" itself has at least two main, distinct meanings, including a software process which responds to a request, and the hardware where server applications execute."

Applicants have clarified that the clusters are logically defined, that is, sets of logically defined servers.

Claim 16 has been amended to remove "or" from the preamble, and to clarify and correct the reference to "executing first same code".

Applicants request that the rejection of claims 1-12, and 14-20 under 35 U.S.C. 112 be reconsidered and withdrawn.

35 U.S.C. 103

Claims 1-20 have been rejected under 35 U.S.C. §103(a) over Yang et al. (U.S. Patent Number 6,466,949), hereinafter referred to as Yang, in view of Bruck et al. (U.S. Patent Number 6,801,949), hereinafter referred to as Bruck.

Yang relates to performing event notification in a system of distributed servers, which is what can be used to keep data in synch across multiple servers. The Examiner references Yang for general teachings regarding clusters, mirroring, replication, back end servers, and so forth. Yang does not specifically disclose the use of a GUI to manage the interface to clusters, and for that teaching the Examiner cites Bruck. Yang is silent, as the Examiner notes, on how information and requests are routed to the

servers. (Applicants traverse the suggestion of the Examiner that Yang's silence provides motivation for one to search related arts to find a teaching, such as Bruck. A teaching sufficient to combine references to provide a prima facie case of obviousness needs to be more, applicants assert, than mere silence.)

Bruck describes load balancing as a software program, and indicates that additional servers can be added to improve performance, but does not teach how such can be done with regard to the applications being balanced.

Applicants' claims, as amended, set forth a specific configuration of clustered servers and distribution of functions between first and second clusters which is not taught by Yang or Bruck, nor is it suggested by a combination of them.

That is, applicants invention is directed to scalability and performance, as well as authenticating access to specific tables of data based on usage, in the sense of role: on the type of information the user needs. Not all users have access to everything. This access control is implemented by associating a user with a role,

and considering that role in the code executed in the second cluster. In some cases, users with specific roles take certain actions in the workflow, such as approval of requests. For example, catalog tables are used only by users that are configured to see them (by country/company/department/plant, even by user name). People with particular roles see requests created by other users (vs. just the ones they created), or see their invoices, etc. All of applicants claims bring out this concept by variously reciting that one of the code tables in the second cluster of servers is used to authorize access to other code tables in the second servers based on user role.

Applicants claims are specific to an architecture where servers are clustered and balanced with respect to the applications that are being balanced. This is brought out in applicants claims, which specify the specific functions performed by each of the first and second clusters, and that the second clusters are specific to a particular web application.

Applicants urge that claims 1-12, and 14-20, as amended, be allowed.

SUMMARY AND CONCLUSION


Applicants urge that the above amendments be entered and the case passed to issue with claims 1-12, and 14-20.

The Application is believed to be in condition for allowance and such action by the Examiner is urged. Should differences remain which do not place one/more of the remaining claims in condition for allowance, the Examiner is requested to phone the undersigned at the number provided below for the purpose of providing constructive assistance and suggestions in accordance with M.P.E.P. Sections 707.02(j) and 707.03 in order that allowable claims can be presented without further proceedings being necessary.

Sincerely,

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